

## History list - IQANdevelop

Version	Changes	Date	Rel. Ed.	Remarks
<b>CHANGE OF COMPATIBILITY IDP-version 4.06</b>				
2.08	Conditional text: Delay on/off updated correctly Change of block diagram during measure fixed Internal analog: Channel as slope time bug fixed	11/16/2000		
2.09	Modem connection made more fault tolerant	10/31/2001		
<b>CHANGE OF COMPATIBILITY IDP-version 6.01</b>				
3.02	"Last changed by" functionality improved TOC8 alarm out bug fixed Update vmAC message improved Graph trigger cancel bug fixed TOC8 - modem problems fixed			
3.03	Get error/event log: error handling improved Save as text: scaling bug fixed Error messages problem fixed (when measuring) Multiple function handling on COUT/DOUT: reference problem fixed Splash screen: Position problem fixed Handles parallel ports higher than 1	10/23/2001		
3.04	Move, copy, cut and paste improved "Incomplete function" bug fixed Self-referencing channel can now be removed Improved application version check when sending Objects are cleared when multi function is removed on output channel Graph reset bug fixed Fixed bug when measuring event counter objects USB adapter now better supported	11/21/2001		IQANprotect.dll 1.04
3.05	Property sheet shell extension improved (support for ido files etc) MSC and SSC: object measure improved TOC8: pin numbers on print-out updated	12/20/2001		IQANdevShellExt.dll 1.2
<b>CHANGE OF COMPATIBILITY IDP-version 6.02</b>				
3.50	Added new channel types: JAOUT and JDOUT for communication with external systems via CAN. SMSIN and SMSOUT for communication via SMS. Added multi function for IAC Added BWL property to COUT and PWM Increased number of MAC Replaced expansion module diagnostics with MDGN (same as master modules) Error and event log now handled independently New MDGN channels on MDM and TOC8 for error and event log count Channel priority order inconsistency fixed Channels on all block diagrams are now in correct priority order Now possible to stop logging of errors and/or events when log is full	2/5/2002		

Graph improved, now supports dynamic cycle time  
Application statistics improved (object count more detailed)  
J1939 properties on XT2 updated  
Register PDA menu item added  
ELOG, HCNT, MDGN no longer reported as "Unused channels"  
Get error log from G2 now possible  
'Allow reset to zero' added to HCNT, ECNT and MEM  
Stored values can now be reset to zero when sending application  
Script language iSMS added  
Extra language in IQANdevelop properties added, 'Default channel name'

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<b>3.51</b>	MDGN channel names changed Warnings added and improved Get application is now optional when getting error/event log PDA registration can now be saved to a file for remote registration Dither for secondary current outputs problem fixed	
<b>3.52b909</b>	TOC2 added JxOUT now supports proprietary type A Same SA is used for all JxOUT, specified on module properties Measure bug when switching between graph and block diagram fixed Typical installation now includes IQANsimulate User manual updated	2/24/2002
<b>3.52b910</b>	IQANprotect.dll backward compatibility fixed	2002-02-29
<b>3.53</b>	Manual: Alarm out clarified Dither amplitude on XP back (was removed by mistake in previous version) MDM: PID and ILC count increased to 8 TOC2: IDC count increased to 4, plus an extra MDGN, VIN diff Graph: Print problem fixed Update of vmAC-TOC2 now supported	6/13/2002
<b>3.54</b>	Update vmAC now preserves stored values (bug fixed) Modem communication made more stable TOC2 improvements, printout, update vmAC, max current on COUT, etc Dual "Apply changes?" problem fixed Chat: Fixed bug when using Timeout=0 XT2 application without JxOUT channels and SenderAddress <> 39 can now be downloaded Fixed: After using a modem on a comport, the baudrate could be invalid	8/28/2002
<b>3.55</b>	MDM MDGN added: SMS available, iSMS counter, Modem status, Weekday, Real time clock TOC8 MDGN added: SMS available, iSMS counter, Modem status TOC2 MDGN added: Encoder counter, Encoder button, Utilization Allow answer without user confirmation option added to MDM properties Improved error checking of J1939 channels New appendix in user manual: Choosing a modem	9/26/2002

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3.56	Added support for application codes in software keys Data formatting in J1939 channels more flexible (bitwise) Read-only files now handled correctly JAIN/JAOUT: now handles 32-bit integers Trigger channel now saved in idm-files Improved file extension handling Send application dialog box redesigned, new option for stored values TOC2 properties: frequency bug fixed Bug when updating from G3 to G3 second edition fixed	11/12/2002	0246	
3.57	Palm registration moved to IQANconduit, accessed via HotSync Removed PGN constraint for JxOUT, all PGN:s can now be used Application comment disabled for TOC2 Error/event log: Save as text added	3/4/2003	0312	
3.58	Added support for licence numbers (hardware key still supported) Added application code file support (only when using licence number) Added J1939 support on TOC8 Added file version check on save, warns when overwriting older version file Fixed minor bug when saving J1939 channels as text Fixed integer overflow bug in graph (large graph files) User manual updated	6/17/2003	0325	
3.59	Could not save a file without a valid key. Fixed. Com port status lamp now indicates valid com port instead of active master module.	9/9/2003	0337	
	Could not download some J1939 applications to IQAN-TOC8. Fixed.			
3.60	Dither frequency now displayed correctly on XT2/COU-T-B Added fast response property to FIN on most modules Sender address now updated correctly for JAOUT, JDOUT, JGAS Application code security enhanced	4/19/2004	0427	build 1032
3.61	Change level required to clear error/event log. New application property: Allow "Change" level to see channel functions. Hardware keys now have higher priority than software keys.	8/3/2004	0432	build 1037
<b>CHANGE OF COMPATIBILITY IDP-version 6.03</b>				
4.00	Application code protection now also for error/event log. Clear error/event log: Information on who and when. Support for large font and high DPI displays.	9/3/2004	0436 0449 0626 0644 0705	build 1082
4.01	Support for PC's with Dual Core processors when updating vmAC.	8/8/2007	0732	
4.02	Installation software updated Fixed problem where IQANdevelop could freeze at splash screen on rare occasions.	12/12/2007	0743 0825	IQANxplore 4.02.5 IQANxplore 4.02.6

## History list - IQANsimulate

Version	Changes	Date	Rel. Ed.	Remarks
3.02	Excel not valid integer bug fixed Mouse pointer lock to trackbar issue fixed VIN short circuit error simulation -> not valid channel issue fixed			Affected systems with decimal point representation (US)
3.03	Entering values on FIN resulting in truncation or zero issue fixed XP2/XT2 offline on MDM after download issue fixed	11/21/2001		
3.04	Unknown CAN thread.resume latency guard added Major changes to excel integration Fixed bug if using more than 10 channels as in from excel Extended excel in channels to 20 Reset all excel links now removes Bold + memory leak fix Always reset master upon open file (fixes XP2/XT2 offline probs upon IQANdev sync) Changed EGAS output value On save: fix FIN erroneous value + creeping VIN values Added Link to excel popupmenus to all channels COUT leds use adjustable values if adjustable (Driver 1) COUT/DOUT/EGAS statusbar hint update on focus with keyboard Added Update IQANdevelop popupmenus to all channels	12/20/2001		
3.50	Fixed hint on JAIN/JDIN Fixed erroneous values on JAIN due to overflow J1939 engine diagnostic added Playback cycletime changed to SampleTime instead of 50 Excel COUT/DOUT integration added	3/8/2002		
3.51	Faster CAN handling using ncReadMulti Editing an excel cell and integrating causes some kind of hang/lock.Now guarded w 1 sec timeout  Changed excel related exit order.	4/8/2002		
3.52	Fixed Index out of bounds error when replaying graph log file Added support feature write to IQANsim.debug.txt file CAN traffic indicator added Added integrating and percent to excel link hints Hint over statusbar as IQANdevelop	5/15/2002		
3.53	Fixed J1939 channels not working due to array out of bound. Fixed read settings error if J1939 module missing Added detection of early CAN thread termination Fixed a bunch of range check errors	6/16/2002		
3.54	Fixed loss of settings and excel links upon IQANdev->IQANsim sync when having changed app desc or app ver Fixed error when opening iss file containing J1939 stuff when no XT2 in app Now saving As percent property on excel links Fixed FIN filtering on XP channel B, XP2 and XT2	8/28/2002		

	Fixed support for dual independent PWM		
<b>3.55</b>	New CAN core Changes to GUI Automatic reacquire TOC8 upon load (untested) Fixed multiple modules error Fixed bug removing dual independent PWM excel link Default selecting 'as output' for output channels and 'as input' for input channels when excel linking	9/24/2002	
<b>3.56</b>	Fixed COUT bargraph not showing current in + direction if min and max current equal in - direction  Added JOUT and JGAS support Automatic creation of J1939 panel known bug: Saving JAIN values does not work correctly	11/7/2002	<b>0246</b>
<b>3.57</b>	Fix to NICAN driver v2.0 VIN error when min > max fixed	3/7/2003	<b>0312</b>
<b>3.58</b>	Licence support Fixed XR module multiple module/timeout bug Fixed popup menu not to show on disabled channel editboxes	6/18/2003	<b>0325</b> <b>0337</b>
<b>3.59</b>	Spring loaded prop on VIN's on XR module Fixed issue entering decimals on VIN	7/1/2004	<b>0427</b> <b>0432</b>
<b>4.00</b>	Support for large font and high DPI displays.	9/3/2004	<b>0436</b> <b>0449</b> <b>0626</b> <b>0644</b> <b>0705</b> <b>0732</b> <b>0743</b> <b>0825</b>

## History list - vmAC-MDM

Version	Changes	Date	Rel. Ed.	Remark
<b>CHANGE OF COMPATIBILITY IDP-version 2.01</b>				
1.36		2000-04.25		
<b>CHANGE OF COMPATIBILITY IDP-version 4.06</b>				
2.08	Reset to factory defaults dit not work for some channeltypes Bug currentcheck always blamed Primary, even if Secondary was the wrong one.	11/16/2000		
2.13	Changed current check of XP. Only alarms if time > 0.75 seconds Changed looks of info menu.	1/10/2001		
2.14	Changed compiler version	1/19/2001		
2.15-16	Fixed bug in MAC calulation (floating-point arithmetic)	1/29/2001		
2.17	Support for Palm Pilot			
2.18	Improved initiation of XP2	3/12/2001		
2.19	Added support for ALRM in conditional objects Fixed reset-mode and copy-mode of adjustable drivers	3/16/2001		
<b>CHANGE OF COMPATIBILITY IDP-version 6.00</b>				
3.04	Fixed bug in ECNT. OR function of locking objects did not work.	6/21/2001		
3.05	Fixed bug in multifunction of EGAS. If MSC Enabling channel is False use manually decided channel Linear/cond object only supported error for VIN and COUT. Now also support NO_CONTACT for all channeltypes. All physical output channels now have errorstatus by NO CONTACT. Fixed some bugs regarding dual channels in CMSG Added support for PWM-measurement of EGAS channel (unscaled value)	8/6/2001		
<b>CHANGE OF COMPATIBILITY IDP-version 6.01</b>				
3.07	Added BWL window (slopedampwindow) for IAC channel Increased number of IAC to 16,SSC to 8 Fixed bug in reset for HCNT (can give bug in PalmPilot application)			
3.08	Added support for atan,acos,asin,tan	8/23/2001		
3.09-10	Fixed bug for LPWM frequency for XT2 Fixed bug for MSC enabling channel Added early reset of DSR signal to keep modemline open by reset of MDM	9/24/2001		
3.11	When using a modem new download can now be done after a cancelled download. To improve landmodemcommunication time-out delay was prolonged.	10/3/2001		
3.12	Fixed bug in DOUT check for XT2 and XP2. This error could result in problems of misinterpretation of the internal channels of CNT,MDC and IAC. Sound added when remote chatfunction active. Changed bargraphfunction to be related to zero. (Normal function is now that negative numbers grows leftwards,positive numbers grows rightwards) Fixed bug for decimalvalues in CMSG. Bargraph in not "Show always" implemented. Modified languages : German,Danish,Finnish,French,Italian,Portuguese,Swedish	11/21/2001		

Axis errors from Lx were wrongly interpreted. Fixed  
Fixed bug with digital channel in linear objects. Could occur if analog channel with return to zero activated were replaced by a digital channel.  
Changed timestampfunction to 50 mS

3.13	(1) Fixed problems with error messages COUT. Did not go away even if error went away. (2) Fixed problems with values of the following channels in eventlogger : ECNT,SSC,MSC,IMSG	12/5/2001
3.14	(1) Fixed problems with error messages COUT overload. Did not turn up on display. (2) Fixed problems with error messages COUT for IQAN-XP. Did not work properly for outputs D,E,F. (3) Fixed problems with object measurement of MSC and SSC (4) If sensor failure or Vref failure at VIN, measure in MDM will view actual voltage rather than error-value.	12/20/2001
3.15	(1) Fixed bug maximum number of ELOG channels	12/21/2001
<b>CHANGE OF COMPATIBILITY IDP-version 6.02</b>		
3.50	(1) Changed number of MAC channels to 24 (2) IAC now supports multifunction (3) JAOUT and JDOUT channels added (4) COUT and LPWM now supports BWL function (5) Fixed bug when using JAIN/JDIN as channels in objects (6) Fixed bug for max number of JDGN channels (7) Fixed bug for module properties of TOC8 (8) Added SPN/FMI numbers for alarm message in MDM display for JDGN channels (9) Priority setting for J1939 Diagnostic messages added to XT2 module properties (10) Fixed bug regarding some channel types did not turn up in CMSG channels in MDM display (11) Module diagnostic channels are now supported for all module types (12) SPN conversion method implemented for J1939 diagnostics (13) New channel type SMS out added (14) Fixed bug regarding timestamped measuring when cycle-time <> 50 mS (15) Split logger function for EVENT resp ERROR (16) Added "stop when full" function for both loggers (17) Password protection is now used also for Mode Reset/Copy (18) New channel type SMS-in added (19) iSMS protocol added (20) Fixed bug regarding vmAC crash when modem removed during run-time (21) Fixed bug regarding use of PWM channels for multiple XT2's.	1/30/2002
3.51	(1) Changed OSE and compiler versions	3/8/2002
3.52	(1) Fixed bug for BWL function of IAC and COUT when command value get to zero. (2) Added EPOS and EGAS in measure menu for display (3) Modem now works even for other operators than the home operator. (4) Multiple errors by startup could do that date/time in errorlogger would be wrong. Fixed	4/5/2002
3.53	(1) Fixed bug regarding hardware version setting for production (2) Fixed problem with landline-modem. (Did not answer incoming call) (3) Added extra startup delay for modem detection (4) Fixed problem with unreliable message "GSM Pin code needed". (Added delay in driver routine)	4/26/2002

	(5) Fixed problem with system overview measurement	
	(6) Fixed bug regarding fraction part of values for iSMS	
<b>3.54</b>	(1) Fixed bug regarding JAOUT channels defined on odd bytes	
<b>3.55</b>	(1) Changed back to compiler 7.0r1 due to slower execution time with version 7.5r2	5/24/2002
	(2) Fixed bug regarding objectmeasurement in IQANdevelop for HCNT and MEM channels	
<b>3.56</b>	(1) Fixed bug for delays in IDC channels. The delay was executed two times faster than expected.	6/3/2002
	(2) Locking objects for IMMSG now works properly.	
	(3) Statusflag (in IQANdevelop) for CMSG/IMMSG now works properly when channel is locked.	
<b>3.57</b>	(1) Fixed bug for IDC when delay==0 is used. (New bug derated from 3.56)	6/4/2002
<b>3.58-3.59</b>	(1) Added ':' to iSMS answers. (To avoid infinite loop problems if calling your own number)	6/16/2002
	(2) Improved functionality for non-SMS GSM-modems, e.g cellphones	
	(3) SMSOUT now supports #SV# functionality	
	(4) Negative values in iSMS now works better	
	(5) Some channeltypes didn't show units in CMSG/IMMSG. Fixed.	
	(6) Modemicon now also shows up when line is open.	
	(7) Number of PID and ILC increased to 8	
	(8) Landline modem speed lowered to 9600	
	(9) Can now handle hangup of telephone line, or restart of master	
<b>3.60</b>	(1) Fixed bug for initialization of ripple amplitude for channels C and F for IQAN-XP.	7/22/2002
<b>3.61</b>	(1) Flanktriggered channels (MEM,ECNT,IDC toggle) are now initialized as in idle position.	7/30/2002
	This means that by power-up the function will be triggered even if the function is already True.	
	In previous versions the function had to be FALSE first then True.	
	(2) SMSOUT did not restore value by update vmAC. Fixed.	
	(3) Prolonged time-out when using modem to 3 seconds	
<b>3.62</b>	(1) Fixed bug object measurement of multifunction DOUT	8/1/2002
<b>3.63</b>	(1) SSC statenames now included in SMSOUT message	8/28/2002
	(2) Simulation and errormessages of JDIN implemented	
	(3) Fixed bug regarding adjusting negative FP with PalmPilot	
	(4) PWM now supports DualFunction if used in opposite direction	
<b>3.64</b>	(1) Modemdriver automatically retry modemcommunication if this fails	9/26/2002
	(2) Modemdriver now supports storing/waiting of SMSOUT messages if no GSM coverage	
	(3) Can now handle controlled closing of telephonenumber even for newer modems	
	(4) Fixed problems with storing of PalmPilot adjustments of COUT and LPWM	
	(5) If no module is stated in an iSMS message, master module is assumed	
	(6) Fixed problem with modems starting up in non-verbose mode.	
	(7) Added MDGN-channels "Modem status" and "iSMS cnt"	
	(8) Added MDGN-channels "Weekday" and "Real Time Clock"	
	(9) Now supports that incoming call does not have to be confirmed	
	(10)Improved function when denying incoming call	
	(11)Fixed priorityproblem of JAOUT/JDOUT.	
	(12)JAOUT/JDOUT's channelvalue is now the last sent value of the input channel.	
	(13)Fixed bug regarding measuring of JDIN	
	(14)Fixed bug regarding errorstatus of JDOUT	

	(15)Rescaled Vbat for XT2,XP2,LX2		
	(16)Alarm Hi/Lo for JAIN generated multiple errors in logger. Fixed		
	(17)JDOUT status could be incorrect. Fixed		
	(18)Measure of internal XT2 channels in menusystem of MDM did not work. Fixed		
<b>3.65</b>	(1) Warningtriangle in CMSG and IMSG is removed (2) JIN/JOUT channels now supports non-J1939 alignment (3) When measuring a COUT with objects using multifunction, and then change focus to a COUT without multifunction, vmAC crashed. Fixed.	10/30/2002	
<b>3.66</b>	(1) Fixed bugs regarding large values in JIN/JOUT. (2) When changing mode with PalmPilot, actual mode wasn't stored properly.Fixed	11/14/2002	0246
<b>3.67-3.68</b>	(1) "Changed by key id" doesn't show up properly in display. Fixed (2) Switches to Default language in display when application is downloaded (3) JAIN Alm Hi/Lo did not show up in in display. Fixed (4) Erroneous scaling of VIN and JAIN when Min>Max. Fixed (5) vmAC now support adjusting Factory defaults from PalmPilot application (6) iSMS for MAC now shows unit. (7) Changed startupsequence for GSM modem regarding "Needed Pincode" detection.	1/28/2003	0312
<b>3.69</b>	(1) Changed GSM modeminitiation to support Siemens modem. (2) Changed XP temperature alarm limit. (3) MAC now supports units in CMSG channels (4) Fixed bug JAIN hi/lo alarms didn't show channel name. (5) Removed timeout alarms on display for JAIN (6) Removed logging of timeout for JAIN channels (7) Changed temperature dependancy for contrast to better fit new displaytype (8) JAIN/JDIN can now be trigged if in error (9) Fixed bug regarding SPN channels used by XT2 with adress <> 0 (10)Changed serialnumberpresentation in display to be able to present new style numbers	6/17/2003	0325 0337
<b>3.70</b>	(1) Added support for fast response freq for XT2 and XP2 (2) Fixed wrong finnish text "Korkea lämpötila" (3) Fixed unit for PWM in measurementmenu (mA changed to MR) (4) If channel was omitted in a CTEXT, and "Text and channel" is selected, nothing showed up. Fixed.		
<b>3.71</b>	(1) Autoselect for COUT/PWM always selected mode 0. Fixed.	7/1/2004	0427 0432
<b>CHANGE OF COMPATIBILITY IDP-version 6.03</b>			
<b>4.00</b>	(1) Added checking of the adjustable parameters max/min range of Cout,Lpwm,Vin,Fin and FP (2) Fixed bugs with the alarm channels. The real passive time was too long and the secondary channel didn't work correctly if primary alarm channel was missing. (3) Added logs for clearing error/event logs (IDP is changed). (4) Added application code authentication for clearing error/event logs (IDP is changed). (5) Added AT-command for setting modem to fixed serial port rate.	9/3/2004	0436
<b>4.01-4.05</b>	(1) Fixed bug regarding the multi mode display indicator (active_driver). If an application with multi mode is overwritten of an other application without multi mode the display indicator still showing the latest multi mode.	12/2/2004	0449

- (2) Fixed bug regarding unwanted dots on the display.
- (3) Fixed bug regarding copy from one multi mode to another effect channels without multimode
- (4) Fixed bug regarding linear object that roll over for some special properties.
- (5) Fixed bug when "cancel" from resetting event counter, hour counter or memorizing-channel via the display. The MDM went to the error handler.
- (6) Fixed bug regarding Mode Selection Channel, wrong logic level of Mode1-Mode4 constants.
- (7) Fixed bug regarding the IQAN-Lx START\_LOCK gave wrong message on the display, MODULE OFFLINE instead of START LOCK.
- (8) Changed the Vbat alarm for xp2 and xt2 to VBB HIGH alarm, because the units reports only high voltage (not low voltage).

<b>4.06</b>	(1) Fixed a bug with PWM, one channel one mod, reset to factory default via the Palm. If mode >1 reset to wrong value. (2) Spell correction of KOPIOIN. (3) Changed chan_offset table for XT2 JDIN. Number of changels/unit was 10 but is it only 8 and the maximum number of JDIN channels is 32, so it was possible to exceed.	<b>6/28/2006</b> <b>0626</b>
<b>4.07</b>	(1) Fixed bug with checksum error.	<b>11/2/2006</b> <b>0644</b>
<b>4.08</b>	(1) Added time-out if display communication is lost. The backlight is blinking if the display is lost. Decreased also the priority of the button handler process. (2) Added initialization of driver mode to mode 1 when downloading application. (3) Added also a write of driver mode to mode 1, if driver mode value is corrupt or never set before (previous versions), when reading driver mode at start-up. (4) Changed PWM frequency of backlight from 50 Hz to 750 Hz, because before if low backlight is used the display is not steady. (5) Added control of corrupt month string. Before a corrupt month string cause the MDM to hang.	<b>1/31/2007</b> <b>0705</b>
<b>4.09</b>	(1) Bug introduced in 4.08 gave communication problem with GSM modems. Fixed (2) Changed startup sequence for modem, to be able to communicate with newer GSM modems.	<b>8/8/2007</b> <b>0732</b>
<b>4.50</b>	(1) Support for new hardware with changed display component. (2) Fixed bug regarding calculation overflow with event counter channels at start-up. (3) Fixed bug regarding if RTC stopped, the first page missed to update the time. (4) Fixed bug regarding the "Display control" gets distorted after a while. (5) Fixed bug regarding the supply voltage channels measures 0.5 volts less.	<b>10/25/2007</b> <b>0743</b>
<b>4.51</b>	(1) Added contrast adjustment for MDM2 (2) Fixed problem with uninitialized JAIN by startup (3) Fixed problem with RTC alarm for MDM2. Also changed message "RTC not connected" to "Date/Time not set".	<b>6/11/2008</b> <b>0825</b>

## History list - vmAC-TOC8

Version	Changes	Date	Rel. Ed.	vmAC-MDM compatibility
<b>CHANGE OF COMPATIBILITY IDP-version 6.01</b>				
3.07	Added modem support Added variable loop speed			
3.09	Fixed frq bug in productiontest			
3.10	Included modem improvements in vmac_232, vmac_modem Turned off output enable pin in Prog_chksum_err and Simulate mode Increased COUT error bandwidth from 100 mA to 250mA Fixed EEPROM timing for slower Atmel EEPROM Fixed Param_chk_sum_err get value from EEPROM	11/1/2001		3.11
3.11	(1) Fixed problems with values of the following channels in eventlogger:ECNT,SSC,MSC,IMSG (2) Fixed bug with digital channel in linear objects. Could occur if analog channel with return to zero activated were replaced by a digital channel.	10/3/2001		3.13
<b>CHANGE OF COMPATIBILITY IDP-version 6.02</b>				
3.50	(1)IAC now supports multifunction (2)COUT and LPWM now supports BWL function (3)Fixed bug for module properties of TOC8 (4)Module diagnostic channels are now supported for all moduletypes (5)New channeltype SMS out added (6)Fixed bug regarding timestamped measuring when cycle-time <> 50 mS (7)Splitted loggerfunction for EVENT resp ERROR (8)Added "stop when full" function for both loggers (9>Password protection is now used also for Mode Reset/Copy (10)New channeltype SMS-in added (11)iSMS protocol added (12)Fixed bug regarding vmAC crash when modem removed during run-time	1/30/2002		3.50
3.51	(1) Changed OSE and compiler versions	3/8/2002		3.51
3.52	(1) Fixed bug for BWL function of IAC and COUT when command value get to zero. (2) Modem now works even for other operators than the home operator. (3) Fixe bug for softstart/peak&hold with cycletimes <> 50 mS	4/5/2002		3.52
3.53	(1) Changed back to compiler 7.0r1 due to slower execution time with version 7.5r2 (2) Fixed bug regarding objectmeasurement in IQANdevelop for HCNT and MEM channels	5/24/2002		3.55
3.54	(1) Added ':' to iSMS answers. (To avoid infinite loop problems if calling your own number)  (2) Improved functionality for non-SMS GSM-modems, e.g cellphones (3) SMSOUT now supports #SV# functionality	6/16/2002		3.59

	(4) Negative values in iSMS now works better (5) Modemicon now also shows up when line is open. (6) Landlinemodemspeed lowered to 9600 (7) Can now handle controlled closing of telephonenumber, or restart of master			
3.55	(1) Flanktriggered channels (MEM,ECNT,IDC toggle) are now initialized as in idle position. This means that by power-up the function will be triggered even if the function is already True.In previous versions the function had to be FALSE first then True. (2) SMSIN channels were not recalled when cycling power. Fixed. (3) SMSOUT did not restore value by update vmAC. Fixed. (4) Sometimes SMSOUT with object "True" could refuse to send the sms. Fixed. (5) Fixed bug objectmeasurement of multifunction DOUT (6) Fixed bug filtering VIN (could give spike by startup) (7) Fixed bug regarding adjusting negative FP with PalmPilot	8/28/2002		3.63
3.56	(1) Modemdriver automatically retry modemcommunication if this fails (2) Modemdriver now supports storing/waiting of SMSOUT messages if no GSM coverage  (3) Can now handle controlled closing of telephonenumber even for newer modems (4) Fixed problems with storing of PalmPilot adjustments of COUT and LPWM (5) If no module is stated in an iSMS message, master module is assumed (6) Fixed bug regarding storing of adjustable FP-channels with index>26. (7) Fixed problem with modems starting up in non-verbose mode. (8) Added MDGN-channels "Modem online" and "iSMS cnt"	9/16/2002		3.64
3.57	(1) When measuring a COUT with objects using multifunction, and then change focus to a COUT without multifunction, vmAC crashed. Fixed. (2) Removed functionality according to vmAC 3.55 (1) for ECNT channels. (3) When using multimode on COUT, actual mode wasn't stored properly.Fixed	11/14/2002	0246	3.66
3.58-3.59	(1) Erroneous scaling of VIN when Min>Max. Fixed (2) vmAC now support adjusting Factory defaults from PalmPilot application (3) Fixed bug when using mixes of PWM and DOUT (4) iSMS for MAC now shows unit. (5) Changed startupsequence for GSM modem regarding "Needed Pincode" detection. (6) Fixed bug for status of "MDGN-Modem Status"	1/28/2003	0312	
3.60-3.62	(1) Changed GSM modemininitiation to support Siemens modem. (2) Added J1939 functionality (3) Fixed bug adjust of LPWM from PalmPilot. (Previous versions overlaid info on COUT)	6/17/2003	0325 0337	3.69
3.63	(1) Changed COUT current check to use 3 cycles error-counter (2) CAN termination is now ON by default	7/1/2004	0427 0432	3.69
<b>CHANGE OF COMPATIBILITY IDP-version 6.03</b>				
4.00	(1) Individual PWM outputs added (2) Fast response freq added	9/3/2004	0436	

(3) Added checking of the adjustable parameters max/min range of Cout,Lpwm,Vin,Fin and FP

(4) Fixed bugs with the alarm channels. The real passive time was too long and the secondary alarm channel didn't work correctly if primary channel was missing

(5) Added logs for who cleared error/event logs (IDP is changed).

(6) Added application code authentication for clearing error/event logs (IDP is changed).

(7) Added AT-command for setting modem to fixed serial port rate.

(8) Changed scaling of VREF A and VREF B.

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<b>4.01-4.03</b>	(1) Fixed simulation mode problem with that the alarm channel didn't worked correctly.	<b>12/2/2004</b>	<b>0449</b>
	(2) Fixed bug regarding linear object that roll over for some special properties.		<b>0626</b>
	(3) Fixed bug regarding Mode Selection Channel, wrong logic level of Mode1-Mode4 constants.		<b>0644</b>
	(4) Stopping the CAN communication during downloading the application.		<b>0705</b>
<b>4.05</b>	(1) Changed startup sequence for modem, to be able to communicate with newer GSM modems.	<b>8/8/2007</b>	<b>0732</b>
			<b>0743</b>
			<b>0825</b>

## History list - vmAC-TOC2

Version	Changes	Date	Rel. Ed.	vmAC-MDM compatibility
<b>CHANGE OF COMPATIBILITY IDP-version 6.02</b>				
3.50	First released version of vmAC-TOC2	8/28/2002		3.63
3.51	Removed internal hourcounterfunction	9/16/2002		3.64
3.52	(1) Fixed bug delay on/off for IDC (2) Added MDGN "Encoder counter", "Encoder button" and "Utilization" (3) Optimized measurement of VIN (4) Production id were destroyed during production mode. Fixed	9/26/2002		
3.53	(1) Fixed bug filter for VIN (2) Fixed bug slopetimes which disappeared after power on/off (3) Fixed bug PID regulator (4) Fixed bug product id for production purpose	10/7/2002	0246	
3.54	(1) Fixed bug for AND/MaxOf function in COUT PWM (2) Autoselectfunction now works properly	11/19/2002	0312 0325 0337 0427 0432 0436 0449 0626 0644 0705 0732 0743 0825	